Noise and Mitigation Strategies

- Noise mitigation is required when;
  - New construction results in noise levels “approaching” 67 dBA; ie at 66 dBA

  Or,

  - New construction results in an increase of 10 dBA over existing levels
- Noise data was collected at 20 long-term (24 hour) sites and 70 short-term (15-30 minute) sites.
- Numerous “receptors” along SR 520 currently exceed the 67 dBA threshold

Noise and Mitigation Strategies

- A case study was developed in the vicinity of the 84th Ave./SR 520 Interchange
- 84th Ave. Case Study
  - Noise Treatment Options Considered included:
    - Noise walls along both sides of the highway
    - Lid (unventilated) approx.. 300' long, with noise walls along highway
    - Lid (ventilated) approx.. 1350' long, with noise walls along highway
- Findings
    - Noise walls effective. Significantly lower than existing conditions.
    - A 1 dBA decrease (imperceptible) is gained by the 300' lid.
    - A 2 dBA decrease is gained by the largest lid.
    - 5 out of 32 receivers would experience a 3-4 dBA reduction (perceptible) over just walls.